

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/619,761

Source: _____

Date Processed by STIC: _____

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IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/619,761

DATE: 12/01/2004

TIME: 09:48:11

Input Set : N:\Crf3\RULE60\10619761.raw.txt

Output Set: N:\CRF4\12012004\J619761.raw

```

1 <110> APPLICANT: STONE, EDWIN M.
2   SHEFFIELD, VAL C.
3 <120> TITLE OF INVENTION: MACULAR DEGENERATION DIAGNOSTICS AND THERAPEUTICS
4 <130> FILE REFERENCE: UIA-018.03
5 <140> CURRENT APPLICATION NUMBER: US/10/619,761
6 <141> CURRENT FILING DATE: 2003-07-14
7 <150> PRIOR APPLICATION NUMBER: US/09/322,357
8 <151> PRIOR FILING DATE: 1999-05-28
9 <160> NUMBER OF SEQ ID NOS: 74
10 <170> SOFTWARE: PatentIn Ver. 2.1
12 <210> SEQ ID NO: 1
13 <211> LENGTH: 493
14 <212> TYPE: PRT
15 <213> ORGANISM: Homo sapiens
16 <400> SEQUENCE: 1
17   Met Leu Lys Ala Leu Phe Leu Thr Met Leu Thr Leu Ala Leu Val Lys
18       1           5           10           15
19   Ser Gln Asp Thr Glu Glu Thr Ile Thr Tyr Thr Gln Cys Thr Asp Gly
20           20           25           30
21   Tyr Glu Trp Asp Pro Val Arg Gln Gln Cys Lys Asp Ile Asp Glu Cys
22           35           40           45
23   Asp Ile Val Pro Asp Ala Cys Lys Gly Gly Met Lys Cys Val Asn His
24       50           55           60
25   Tyr Gly Gly Tyr Leu Cys Leu Pro Lys Thr Ala Gln Ile Ile Val Asn
26       65           70           75           80
27   Asn Glu Gln Pro Gln Glu Thr Gln Pro Ala Glu Gly Thr Ser Gly
28           85           90           95
29   Ala Thr Thr Gly Val Val Ala Ala Ser Ser Met Ala Thr Ser Gly Val
30           100          105          110
31   Leu Pro Gly Gly Gly Phe Val Ala Ser Ala Ala Ala Val Ala Gly Pro
32           115          120          125
33   Glu Met Gln Thr Gly Arg Asn Asn Phe Val Ile Arg Arg Asn Pro Ala
34           130          135          140
35   Asp Pro Gln Arg Ile Pro Ser Asn Pro Ser His Arg Ile Gln Cys Ala
36           145          150          155          160
37   Ala Gly Tyr Glu Gln Ser Glu His Asn Val Cys Gln Asp Ile Asp Glu
38           165          170          175
39   Cys Thr Ala Gly Thr His Asn Cys Arg Ala Asp Gln Val Cys Ile Asn
40           180          185          190
41   Leu Arg Gly Ser Phe Ala Cys Gln Cys Pro Pro Gly Tyr Gln Lys Arg
42           195          200          205
43   Gly Glu Gln Cys Val Asp Ile Asp Glu Cys Thr Ile Pro Pro Tyr Cys
44           210          215          220

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45      His Gln Arg Cys Val Asn Thr Pro Gly Ser Phe Tyr Cys Gln Cys Ser
46      225                230                235                240
47      Pro Gly Phe Gln Leu Ala Ala Asn Asn Tyr Thr Cys Val Asp Ile Asn
48                245                250                255
49      Glu Cys Asp Ala Ser Asn Gln Cys Ala Gln Gln Cys Tyr Asn Ile Leu
50                260                265                270
51      Gly Ser Phe Ile Cys Gln Cys Asn Gln Gly Tyr Glu Leu Ser Ser Asp
52                275                280                285
53      Arg Leu Asn Cys Glu Asp Ile Asp Glu Cys Arg Thr Ser Ser Tyr Leu
54                290                295                300
55      Cys Gln Tyr Gln Cys Val Asn Glu Pro Gly Lys Phe Ser Cys Met Cys
56      305                310                315                320
57      Pro Gln Gly Tyr Gln Val Val Arg Ser Arg Thr Cys Gln Asp Ile Asn
58                325                330                335
59      Glu Cys Glu Thr Thr Asn Glu Cys Arg Glu Asp Glu Met Cys Trp Asn
60                340                345                350
61      Tyr His Gly Gly Phe Arg Cys Tyr Pro Arg Asn Pro Cys Gln Asp Pro
62                355                360                365
63      Tyr Ile Leu Thr Pro Glu Asn Arg Cys Val Cys Pro Val Ser Asn Ala
64                370                375                380
65      Met Cys Arg Glu Leu Pro Gln Ser Ile Val Tyr Lys Tyr Met Ser Ile
66      385                390                395                400
67      Arg Ser Asp Arg Ser Val Pro Ser Asp Ile Phe Gln Ile Gln Ala Thr
68                405                410                415
69      Thr Ile Tyr Ala Asn Thr Ile Asn Thr Phe Arg Ile Lys Ser Gly Asn
70                420                425                430
71      Glu Asn Gly Glu Phe Tyr Leu Arg Gln Thr Ser Pro Val Ser Ala Met
72                435                440                445
73      Leu Val Leu Val Lys Ser Leu Ser Gly Pro Arg Glu His Ile Val Asp
74                450                455                460
75      Leu Glu Met Leu Thr Val Ser Ser Ile Gly Thr Phe Arg Thr Ser Ser
76      465                470                475                480
77      Val Leu Arg Leu Thr Ile Ile Val Gly Pro Phe Ser Phe
78                485                490

```

80 <210> SEQ ID NO: 2

81 <211> LENGTH: 20

82 <212> TYPE: DNA

83 <213> ORGANISM: Artificial Sequence

84 <220> FEATURE:

85 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer

86 <400> SEQUENCE: 2

87 gttttgttac tttccccgca

20

89 <210> SEQ ID NO: 3

90 <211> LENGTH: 20

91 <212> TYPE: DNA

92 <213> ORGANISM: Artificial Sequence

93 <220> FEATURE:

94 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer

95 <400> SEQUENCE: 3

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Input Set : N:\Crf3\RULE60\10619761.raw.txt

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96      actggcaggg gtgtgtaaag                20
98 <210> SEQ ID NO: 4
99 <211> LENGTH: 20
100 <212> TYPE: DNA
101 <213> ORGANISM: Artificial Sequence
102 <220> FEATURE:
103 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
104 <400> SEQUENCE: 4
105      ccaattaact gtctcctggc                20
107 <210> SEQ ID NO: 5
108 <211> LENGTH: 21
109 <212> TYPE: DNA
110 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
113 <400> SEQUENCE: 5
114      aaggcaatga tcacatggaa g                21
116 <210> SEQ ID NO: 6
117 <211> LENGTH: 25
118 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
122 <400> SEQUENCE: 6
123      catgtttgat ttttccctct tagaa            25
125 <210> SEQ ID NO: 7
126 <211> LENGTH: 21
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
131 <400> SEQUENCE: 7
132      atgctgctgg cagctacaac c                21
134 <210> SEQ ID NO: 8
135 <211> LENGTH: 18
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial Sequence
138 <220> FEATURE:
139 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
140 <400> SEQUENCE: 8
141      aacctcaggg gcaaccac                    18
143 <210> SEQ ID NO: 9
144 <211> LENGTH: 27
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
149 <400> SEQUENCE: 9
150      ttcaatggtt aggaaaagaa gttattc          27

```

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Input Set : N:\Crf3\RULE60\10619761.raw.txt

Output Set: N:\CRF4\12012004\J619761.raw

```

152 <210> SEQ ID NO: 10
153 <211> LENGTH: 23
154 <212> TYPE: DNA
155 <213> ORGANISM: Artificial Sequence
156 <220> FEATURE:
157 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
158 <400> SEQUENCE: 10
159      tgacaattct ttctgtgttg cat                                23
161 <210> SEQ ID NO: 11
162 <211> LENGTH: 20
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
167 <400> SEQUENCE: 11
168      ctcaagacag gaccgtgctc                                20
170 <210> SEQ ID NO: 12
171 <211> LENGTH: 21
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
176 <400> SEQUENCE: 12
177      ttctctttgt gtgtgtgcct g                                21
179 <210> SEQ ID NO: 13
180 <211> LENGTH: 20
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
185 <400> SEQUENCE: 13
186      tgggggtttcc ttttgtgaag                                20
188 <210> SEQ ID NO: 14
189 <211> LENGTH: 27
190 <212> TYPE: DNA
191 <213> ORGANISM: Artificial Sequence
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
194 <400> SEQUENCE: 14
195      caaaagagta aggatatgtt taaagtc                                27
197 <210> SEQ ID NO: 15
198 <211> LENGTH: 24
199 <212> TYPE: DNA
200 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
203 <400> SEQUENCE: 15
204      ggactttatt ccatactatc tggg                                24
206 <210> SEQ ID NO: 16

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RAW SEQUENCE LISTING

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Output Set: N:\CRF4\12012004\J619761.raw

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207 <211> LENGTH: 22
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
212 <400> SEQUENCE: 16
213      tgggtgcacaa acttttcaac tc                                22
215 <210> SEQ ID NO: 17
216 <211> LENGTH: 20
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer.
221 <400> SEQUENCE: 17
222      tcctcttggtc tcttcctggc                                20
224 <210> SEQ ID NO: 18
225 <211> LENGTH: 20
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
230 <400> SEQUENCE: 18
231      cttgcaaaca gaatctgcca                                20
233 <210> SEQ ID NO: 19
234 <211> LENGTH: 25
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
239 <400> SEQUENCE: 19
240      tcctcacttt caaaagttct gattt                            25
242 <210> SEQ ID NO: 20
243 <211> LENGTH: 20
244 <212> TYPE: DNA
245 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
248 <400> SEQUENCE: 20
249      accaagccaa actgctgaat                                20
251 <210> SEQ ID NO: 21
252 <211> LENGTH: 22
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
257 <400> SEQUENCE: 21
258      aaaagtattg atggtgttgg ca                                22
260 <210> SEQ ID NO: 22
261 <211> LENGTH: 20

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/619,761

DATE: 12/01/2004
TIME: 09:48:12

Input Set : N:\Crf3\RULE60\10619761.raw.txt
Output Set: N:\CRF4\12012004\J619761.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:49; N Pos. 1217
Seq#:50; N Pos. 48,54,65,66,87,99,119,123,129,145,160,165,167,171,175,191
Seq#:50; N Pos. 195,205,216,251,362
Seq#:61; N Pos. 420,426,437,438,478,524,528
Seq#:64; N Pos. 58,106,157
Seq#:66; N Pos. 122,182,189,260,311,336,395,398,688,727,733,745,777,785,815
Seq#:66; N Pos. 826,831,854,865,908,912,914,923,945,965
Seq#:71; N Pos. 122
Seq#:72; N Pos. 28,33,44,48,54,65,71,93,135,139,140,157,165,183

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:49; Line(s) 518
Seq#:50; Line(s) 549
Seq#:61; Line(s) 670
Seq#:64; Line(s) 726
Seq#:66; Line(s) 749
Seq#:71; Line(s) 821
Seq#:72; Line(s) 847

VARIABLE LOCATION SUMMARY

DATE: 12/01/2004

PATENT APPLICATION: US/10/619,761

TIME: 09:48:12

Input Set : N:\Crf3\RULE60\10619761.raw.txt

Output Set: N:\CRF4\12012004\J619761.raw

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of <220> to <223> is MANDATORY if n's or Xaa's are present.

in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:49; N Pos. 1217

Seq#:50; N Pos. 48,54,65,66,87,99,119,123,129,145,160,165,167,171,175,191

Seq#:50; N Pos. 195,205,216,251,362

Seq#:61; N Pos. 420,426,437,438,478,524,528

Seq#:64; N Pos. 58,106,157

Seq#:66; N Pos. 122,182,189,260,311,336,395,398,688,727,733,745,777,785,815

Seq#:66; N Pos. 826,831,854,865,908,912,914,923,945,965

Seq#:71; N Pos. 122

Seq#:72; N Pos. 28,33,44,48,54,65,71,93,135,139,140,157,165,183

VERIFICATION SUMMARY

DATE: 12/01/2004

PATENT APPLICATION: US/10/619,761

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Input Set : N:\CrF3\RULE60\10619761.raw.txt

Output Set: N:\CRF4\12012004\J619761.raw

L:541 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:49
L:541 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:49
L:541 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:1200
L:552 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:50
L:552 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:50
L:552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
M:341 Repeated in SeqNo=50
L:679 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:61
L:679 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:61
L:679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:360
M:341 Repeated in SeqNo=61
L:729 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:64
L:729 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:64
L:729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0
M:341 Repeated in SeqNo=64
L:754 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:66
L:754 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:66
L:754 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:120
M:341 Repeated in SeqNo=66
L:826 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:71
L:826 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:71
L:826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:120
L:850 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:72
L:850 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:72
L:850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0
M:341 Repeated in SeqNo=72